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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/696,674

10/25/2000

Yasushi Sasagawa

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EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,674

Applicant(s)

SASAGAWA, YASUSHI

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-12 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-10 and 17-21 is/are allowed.
- 6) ☒ Claim(s) 1,11,12 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 21, 2005 have been fully considered but they are not persuasive.

Applicant's argument with respect to claims 1 and 12, did not clarify what is the difference between the invention and Chuah, or specify how LSRs are not logically divided into a plurality of LSRs. In the Remark, p. 11, para. 1, it simply states that "[h]owever in contrast to applicant's claimed invention Chuah does not disclose or suggest the features in the first and second steps of claim 1. Specifically, in Chuah, Label Switch Routers ... are not logically divided into a plurality of LSRs." Examiner has provided prior art support for the two steps of claim 1, namely 1. a step of logically dividing and a step of merely specifying, in the last Office Action. Additionally, Examiner has shown "logically divided into a plurality of LSR using Chuah. In Chuah, Examiner has shown one big LSR which includes LSR1-8 and which can be divided, e.g. divided into LSR4, LSR7, and LSR1, during routing.

Furthermore, the document "Notice of Reasons for Rejection dated September 6, 2005 with translation", as provided by the Applicant, agrees that " the recitation of 'dividing into plural' cannot be understood as to what is divided into plural. ... in the Detailed Description of the Invention ... there is no description of 'logically dividing into plural'", p.6, para. 2 and 3.

Applicant's argument with respect to claims 12 and 22, also did not argue the missing MPLS-to-IP forwarding function, the communication function, and the forward

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function. Remark, p. 11, para. 4. Examiner has provided prior art support for the missing components in the last Office Action using Chuah.

For Applicant's convenience, Examiner has expanded the explanation of the prior art support for a MPLS-to-IP forwarding function, the communication function, and the forward function.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claim 1 and 11** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Chuah et al. (U.S. Pat No. 6,408,001).

With regard to claim 1, Chuah discloses an explicit routing method in a label switching system (MPLS, col. 6, ln. 11), comprising:

a step of logically dividing (LSR1-8 form one big LSR, Fig. 4, col. 6, ln. 20-23, and then, for example, one big LSR is divided into LSR4-LSR7-LSR1, Fig. 5, col. 6, ln. 50-55, for routing purposes) a label switching router (the group of LSRs in the MPLS network) into a plurality of LSRs (LSR1-8) each having a label switching function; and

a step of merely specifying (col. 6, ln. 50-55), when setting a label switched path (LSR4-LSR7-LSR1) on the basis of an explicit route specified (common label switching

path segment, col. 6, ln. 53), a port (ITS coupled with an LSR, col. 6, ln. 59) or a port group of an egress node (LSR1) that corresponds to the LSR (LSR1) terminating the LSP (LSR4-LSR7-LSR1) within the plurality of logically divided LSRs (LSR1-8).

With regard to claim 11, Chuah discloses an explicit routing method in a label switching system, comprising:

a step of specifying an MPLS explicit route (LSR4-LSR7-LSR1, Fig. 6) by adding, to an MPLS-to-IP forwarding function ("...communications transferred...", col. 6, ln. 43-61) of a port group in one specified egress node (LSR1), a communication function (encoding)("In order to transmit a labeled packet ... an LSR must support an encoding which is given a label stack ...", col. 6, ln. 67-col. 7, ln. 2) with MPLS-to-IP forwarding function of a port group (ITSs, Fig. 4) in an intra-system (the group of LSRs in the MPLS network) other egress node, and a forwarding function ("The label stack entry is, comprised of ... guaranteed QoS between a provider and a subscriber ... ", col. 7, ln. 9-10) (it is inherent that there is a forwarding from provider to subscriber and the forwarding is a function of guaranteed QoS) to the port group (ITS2 or ITS3, that is, it is possible LSR4-LSR7-LSR2-ITS2 or LSR4-LSR7-LSR3-ITS3) in the intra-system (the group of LSRs in the MPLS network) other egress node (LSR2 and LSR3 in Fig. 4).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 12 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah.

With regard to claim 12, Chuah discloses a packet router in a label switching system (MPLS, col. 6, ln. 11), as discussed in the rejection of claim 1 above. However, Chuah fails to explicitly show a local router configuring module and a module for merely specifying.

A person of ordinary skill in the art would have been motivated to employ a packet router (grouping LSR1-8 into one LSR) comprising: a local router configuring module for logically dividing a label switching router into a plurality of LSRs each having a label switching function; and a module for merely specifying, when setting a label switched path on the basis of an explicit route specified, a port or a port group of an egress node that corresponds to the LSR terminating the LSP within the plurality of logically divided LSRs, because a method is of no use if it is not encompassed within a device or used within a system. The suggestion/motivation to do so would have been to provide for a means to use Chuah's method. At the time the invention was made, therefore, it would have been obvious to one of ordinary skills in the art to which the invention pertains to have 1.) a local router configuring module, and 2.) a module for merely specifying, as specified in claim 12.

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With regard to claim 22, Chuah discloses a packet router in a label switching system, as discussed in the rejection of claim 11 above. However, Chuah fails to explicitly show a module for specifying an MPLS explicit route.

A person of ordinary skill in the art would have been motivated to employ a packet router (grouping LSR1-8 into one LSR) comprising: a module for specifying an MPLS explicit route by adding, to an MPLS-to-IP forwarding function (see cl. 11) of a port group in one specified egress node, a communication function (see cl. 11) with MPLS-to-IP forwarding function of a port group in an intra-system other egress node, and a forwarding function (see cl. 11) to the port group in the intra-system other egress node, because a method is of no use if it is not encompassed within a device or used within a system. The suggestion/motivation to do so would have been to provide for a means to use Chuah's method. At the time the invention was made, therefore, it would have been obvious to one of ordinary skills in the art to which the invention pertains to have a module for specifying an MPLS explicit route, as specified in claim 22.

Allowable Subject Matter

6. **Claims 6-10, 17-21** are allowed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

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December 16, 2005


CHI PHAM
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER
12/19/05